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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,501	01/08/2004	Shoji Ichinohe	4710-0105P	5138
2292 7590 04/11/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER PENG, KUO LIANG	
			ART UNIT	PAPER NUMBER
			1712	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/11/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/11/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No. 10/752,501	Applicant(s) ICHINOHE, SHOJI	
	Examiner Kuo-Liang Peng	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/22/07 RCE.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-9 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 7-9 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2006 has been entered. Claims 1-6 are deleted. Now, Claims 7-9 are pending.

2. Claim rejection(s) (except Claim 9) under 35 USC 102 and 103 in the previous Office Action (Paper No. 091606) is/are removed.

3. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

### ***Claim Rejections - 35 USC § 112***

4. Rejection of Claim 8 under 35 USC 112 is maintained because the rejection is adequately set forth in paragraph 4 of Paper No. 091606. Applicant's arguments

have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 4, last paragraph to page 5, 1<sup>st</sup> paragraph), Applicants are reminded that it is the **polyethersilicones**, rather than the **composition of matters**, that have the viscosities shown in Table 1

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Heisler (US 6 897 280) and optionally as evidenced by Ferro (Ferro Product Data Sheet for Triglyme, <http://www.ferro.com/NR/rdonlyres/0F9094C0-9FD9-436B-A3E8-82EB02135F45/3119/Triglymedatasheet1.pdf>).

For Claim 7, Heisler discloses a method of preparing a composition of matter comprising polyethersilicone by reacting a polyether having an unsaturated bond at an end thereof with a hydrogensilicone in the presence of a noble metal catalyst. The reaction mixture obtained is **directly** subjected to **vacuum** stripping. (col. 5, lines 58 to col. 6, line 30 and Examples) The polyether can be a polyoxyethylene containing an allyl or a methallyl group with a molecular weight of 204 Daltons, which reads on Applicants' polyether. (col. 7, lines 28-51) As such, the final product should contain the claimed level of unreacted polyether after vacuum stripping. For Claim 8, Heisler further teaches the use of a **hydrogensilicone** having a viscosity of **less than 1 centistoke ( $\text{mm}^2/\text{s}$ )**. The hydrogensilicone further exemplified as **1,1,2,2-tetramethyldisiloxane** (col. 6, line 65 to col. 7, line 11) Furthermore, the polyoxyethylene containing an allyl or a methallyl group with a molecular weight of 204 Daltons contains about 3 repeating units of oxyethylene because the formula weight of the oxyethylene is 44. As such, the polyoxyethylene containing an allyl or a methallyl group with a molecular weight of 204 Daltons has a chemical structure of **triethylene glycol dialkyl ether**. In addition, Ferro teaches that the viscosity of a triethylene glycol dimethyl ether (Triglyme) is 3.8 centipose that is equivalent to about 3.8 centistoke ( $\text{mm}^2/\text{s}$ ) because the specific gravity thereof is 0.9862. Thus, the polyoxyethylene

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containing an allyl or a methallyl group with a molecular weight of 204 Daltons should have a viscosity of **about 3.8 centistoke ( $\text{mm}^2/\text{s}$ )**. Therefore, Heisler's hydrosilylation product derived from the 1,1,2,2-tetramethyldisiloxane (**viscosity of less than 1  $\text{mm}^2/\text{s}$** ) and the polyoxyethylene containing an allyl or a methallyl group with a molecular weight of 204 Daltons (**viscosity of about 3.8  $\text{mm}^2/\text{s}$** ) should have a viscosity **falling within the claimed range**. For Claim 9, Heisler further discloses a composition of matter comprising the polyethersilicone. (col. 11, line 55 to col. 12, line 13) Note that "solvent for an electrolytic solution" is merely an intended use, and does not carry any weight of patentability. See MPEP 2111.02.

8. Rejection of Claim 9 under 35 USC 102(b) as being anticipated by Ichinohe (US 5 288 831) is maintained because the rejection is adequately set forth in paragraph 5 of Paper No. 091606. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, page 5, 2<sup>nd</sup> to 5<sup>th</sup> paragraphs), Ichinohe further teaches a solvent formulation for hair care, etc., comprising the polyether

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silicone. Note that “for an electrolytic solution” is merely an intended use, and does not carry any weight of patentability. See MPEP 2111.02.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

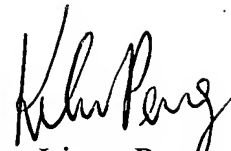
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klp

April 5, 2007

A handwritten signature in black ink, appearing to read 'Kuo-Liang Peng', written in a cursive style.

Kuo-Liang Peng  
Primary Examiner  
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